

- ```

L359: (4386) candle
L360: (33710) paraffin
L361: (8052) triglyceride
L362: (59504) hydrogenat$3
L363: (0) 359 and 360 and 361 and 362
L364: (0) 359 and 361 and 362
L365: (0) vegetable and 359 and 361 and 360
L366: (3) 359 and 361
L367: (0) 359 and 365
L368: (32) 359 and 362

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Q8s EPD JPD DERWENT ☒ Plural ☐ Synonyms

Default operator: OR ☒ Highlight all hit terms initially

359 and 362

09/755644

BRS form IS4K form Image Text

|    | U                        | 1                        | Document ID     | Issue Date | Pages | Title                                                 | Current OR | Current XRef |
|----|--------------------------|--------------------------|-----------------|------------|-------|-------------------------------------------------------|------------|--------------|
| 1  | <input type="checkbox"/> | <input type="checkbox"/> | JP 2000219892 A | 20000808   | 6     | GEL COMPOSITION FOR TRANSPARENT CANDLE                |            |              |
| 2  | <input type="checkbox"/> | <input type="checkbox"/> | JP 06145692 A   | 19940527   | 3     | METHOD TO PREPARE CANDLE AND CANDLE                   |            |              |
| 3  | <input type="checkbox"/> | <input type="checkbox"/> | US 5885600 A    | 19990323   | 5     | Natural insect repellent formula and method of making |            |              |
| 4  | <input type="checkbox"/> | <input type="checkbox"/> | US 5871553 A    | 19990216   | 4     | Fragrance-carrier compositions for use in tart        |            |              |
| 5  | <input type="checkbox"/> | <input type="checkbox"/> | US 5843194 A    | 19981201   | 10    | Clear gel formulation for use in transparent candles  |            |              |
| 6  | <input type="checkbox"/> | <input type="checkbox"/> | US 5534149 A    | 19960709   | 9     | Method of separating catalyst-free working            |            |              |
| 7  | <input type="checkbox"/> | <input type="checkbox"/> | US 5348657 A    | 19940920   | 6     | Process for the separation of catalyst-free working   |            |              |
| 8  | <input type="checkbox"/> | <input type="checkbox"/> | US 5171329 A    | 19921215   | 3     | Method for manufacturing a candle                     |            |              |
| 9  | <input type="checkbox"/> | <input type="checkbox"/> | GB 2197337 A    | 19880518   | 8     | Hydrogenation of palm stearine                        |            | 554/141      |
| 10 | <input type="checkbox"/> | <input type="checkbox"/> | US 4360387 A    | 19821123   | 6     | Isomorphous jojoba oil                                |            |              |

EAST - [Untitled1]

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☐ Saved  
 (6077) candle  
 (17442) triglyceride  
 (100914) fatty ADJ acid\$1  
 (90197) hydrogenat\$3  
 (23) candle and triglyceride and (fatty ADJ acid\$1) and hydrogenat\$3  
 (189) 44/275  
☐ Favorites  
☐ Tagged

☐ Search  
☐ Synonyms  
☐ All terms initially  
 hydrog  
 enat\$3

|    | U                        | I                        | Document ID       | Issue Date | Pages | Title                                                  | Current OR | Current XRef          |
|----|--------------------------|--------------------------|-------------------|------------|-------|--------------------------------------------------------|------------|-----------------------|
| 1  | <input type="checkbox"/> | <input type="checkbox"/> | US 20010013195 A1 |            | 6     | Vegetable lipid-based composition and candle           |            |                       |
| 2  | <input type="checkbox"/> | <input type="checkbox"/> | US 6284007 B1     | 20010904   | 6     | Vegetable lipid-based composition and candle           | 44/275     | 431/288               |
| 3  | <input type="checkbox"/> | <input type="checkbox"/> | US 6242509 B1     | 20010605   | 38    | Gels including bioactive components                    | 523/122    | 424/400<br>; 424/404  |
| 4  | <input type="checkbox"/> | <input type="checkbox"/> | US 6241967 B1     | 20010605   | 12    | Process and device for the production of liquid,       | 424/9.321  | 424/450<br>; 424/9.1  |
| 5  | <input type="checkbox"/> | <input type="checkbox"/> | US 6111055 A      | 20000829   | 39    | Ester-terminated polyamide gels                        | 528/310    | 424/64<br>; 424/66    |
| 6  | <input type="checkbox"/> | <input type="checkbox"/> | US 6063144 A      | 20000516   | 4     | Non-paraffin candle composition                        | 44/275     | 431/126<br>; 431/288  |
| 7  | <input type="checkbox"/> | <input type="checkbox"/> | US 5998570 A      | 19991207   | 16    | Ester-terminated polyamides of polymerized fatty acids | 528/310    | 431/288<br>; 44/275   |
| 8  | <input type="checkbox"/> | <input type="checkbox"/> | US 5952095 A      | 19990914   | 32    | Intercalates and exfoliates formed with long chain     | 428/332    | 106/632<br>; 252/378R |
| 9  | <input type="checkbox"/> | <input type="checkbox"/> | US 5804613 A      | 19980908   | 19    | Intercalates and exfoliates formed with monomeric      | 523/200    | 106/416<br>; 106/484  |
| 10 | <input type="checkbox"/> | <input type="checkbox"/> | US 5783657 A      | 19980721   | 15    | Ester-terminated polyamides of polymerized fatty acids | 528/310    | 524/600<br>; 524/606  |
| 11 | <input type="checkbox"/> | <input type="checkbox"/> | US 5637293 A      | 19970610   | 9     | Preparation for epidermis                              | 424/62     | 424/401               |

☐ Start  
☐ Inbox - Microsoft Outlook  
☐ EAST - [Untitled1]  
☐ STN Express  
☐ Application Number Inform...  
☐ Microsoft Excel - 1/2002

8:25 AM

09/755644

CS Inst. Mining, Krivoi Rog  
 SO Zavodsk. Lab. (1965), 31(9), 1109-10  
 DT Journal  
 LA Russian

=> s tw (P) pn  
       2559 TW  
       60 TWS  
       2612 TW  
           (TW OR TWS)  
       21486 PN  
       1337 PNS  
       22752 PN  
           (PN OR PNS)  
 L7          4 TW (P) PN

=> d 14 1-7 all  
 L4 HAS NO ANSWERS  
 L4          0 SEA FILE=HCAPLUS ABB=ON PLU=ON TW373019/PN

|                      |            |         |
|----------------------|------------|---------|
| => d cost            |            |         |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL   |
|                      | ENTRY      | SESSION |
| CONNECT CHARGES      | 13.30      | 13.45   |
| NETWORK CHARGES      | 0.42       | 0.48    |
| DISPLAY CHARGES      | 4.30       | 4.30    |
|                      | -----      | -----   |
|                      | 18.02      | 18.23   |
| CAPLUS FEE (5%)      | 0.88       | 0.88    |
|                      | -----      | -----   |
| FULL ESTIMATED COST  | 18.90      | 19.11   |

IN FILE 'HCAPLUS' AT 10:20:37 ON 04 NOV 2001

=> s triglyceride and candle  
       29052 TRIGLYCERIDE  
       31885 TRIGLYCERIDES  
       49927 TRIGLYCERIDE  
           (TRIGLYCERIDE OR TRIGLYCERIDES)  
       1607 CANDLE  
       1360 CANDLES  
       2520 CANDLE  
           (CANDLE OR CANDLES)  
 L8          6 TRIGLYCERIDE AND CANDLE

=> d 18 1-6 all

L8 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2001 ACS  
Full-text  
 AN 2001:645561 HCAPLUS  
 DN 135:197796  
 TI Vegetable lipid-based composition and candle  
 IN Tao, Bernard Y.  
 PA Indiana Soybean Board, Inc., USA  
 SO U.S., 6 pp.  
       CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C10L005-00

## STN Columbus

NCL 044275000

CC 51-12 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 2

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | US 6284007     | B1   | 20010904 | US 1998-132991  | 19980812 |
|      | US 2001013195  | A1   | 20010816 | US 2001-802137  | 20010308 |
| PRAI | US 1998-132991 | A1   | 19980812 |                 |          |

AB A vegetable lipid-based compn. comprised of a vegetable lipid component and a petroleum wax is described. The vegetable lipid component may include a **triglyceride** or a free fatty acid/**triglyceride** mixt. The vegetable lipid-based compn. will burn significantly longer than com. **candles**.

ST vegetable lipid **candle**

IT **Candles**  
 Coloring materials  
 Odor and Odorous substances  
 (vegetable lipid-based compn. and **candle**)

IT Fatty acids, uses  
 Glycerides, uses  
 Hydrocarbon waxes, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (vegetable lipid-based compn. and **candle**)

IT 57-10-3, Palmitic acid, uses 57-11-4, Stearic acid, uses 60-33-3, Linoleic acid, uses 112-80-1, Oleic acid, uses 112-85-6, Behenic acid 143-07-7, Lauric acid, uses 373-49-9, Palmitoleic acid 463-40-1, Linolenic acid 506-30-9, Arachidic acid 506-32-1, Arachidonic acid 544-63-8, Myristic acid, uses 557-59-5, Lignoceric acid  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (vegetable lipid-based compn. and **candle**)

RE.CNT 30

RE

- (1) Anon; JP 47030760 1968
- (2) Anon; JP 60051765 1985 HCAPLUS
- (3) Anon; GB 2197337 1988 HCAPLUS
- (4) Baumer; US 1958462 1934
- (5) Beardmore; US 4118203 1978 HCAPLUS
- (6) Cangardel; US 3871815 1975 HCAPLUS
- (7) Comstock; US 4608011 1986
- (8) Drake; US 3429815 1969 HCAPLUS
- (9) Dulling; US 3630697 1971 HCAPLUS
- (10) Easterday; US 3384312 1968
- (11) Elsamaloty; US 5578089 1996
- (12) Kayfetz; US 4134718 1979
- (13) Kirk-Other; Encyclopedia of Chemical Technology, 3rd Edition V24, P473
- (14) Knowles; US 3613658 1971
- (15) Lin; US 5171329 1992
- (16) Luken; US 4759709 1988
- (17) Miller; US 3645705 1972 HCAPLUS
- (18) Morrison; US 5879694 1999 HCAPLUS
- (19) Poulina; US 4813975 1989 HCAPLUS
- (20) Pretorius; US 4002706 1977 HCAPLUS
- (21) Requejo; US 5919423 1999 HCAPLUS
- (22) Reswick; US 2377106 1945
- (23) Sapper; US 4507077 1985
- (24) Saunders; US 4390590 1983 HCAPLUS
- (25) Taylor; US 4855098 1989 HCAPLUS
- (26) Thompson; US 2638411 1953 HCAPLUS
- (27) Tsaras; US 3844706 1974
- (28) Will; US 1954659 1934
- (29) Wilson; US 4614625 1986 HCAPLUS
- (30) Wilson; US 4693890 1987 HCAPLUS

## STN Columbus

L8 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 2001:598353 HCAPLUS

DN 135:154914

TI Vegetable lipid-based composition and candle

IN Tao, Bernard Y.

PA Indiana Soybean Board, USA

SO U.S. Pat. Appl. Publ., 6 pp., Cont. of U.S. Ser. No. 132,991.

CODEN: USXXCO

DT Patent

LA English

IC ICM C10L005-00

NCL 044275000

CC 51-12 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 2

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | US 2001013195  | A1   | 20010816 | US 2001-802137  | 20010308 |
|      | US 6284007     | B1   | 20010904 | US 1998-132991  | 19980812 |
| PRAI | US 1998-132991 | A1   | 19980812 |                 |          |

AB A vegetable lipid-based compn. comprised of a vegetable lipid component and a petroleum wax is described. The vegetable lipid component may include a **triglyceride** or a free fatty acid/**triglyceride** mixt. The vegetable lipid-based compn. has properties that make it advantageous in candle prodn.

ST candle **triglyceride** fatty acid

IT Candles

(vegetable lipid-based compn. and candle)

IT Fatty acids, uses

Glycerides, uses

Hydrocarbon waxes, uses

Paraffin waxes, uses

RL: MOA (Modifier or additive use); USES (Uses)

(vegetable lipid-based compn. and candle)

IT 57-10-3, Palmitic acid, uses 57-11-4, Stearic acid, uses 112-80-1, Oleic acid, uses

RL: MOA (Modifier or additive use); USES (Uses)

(vegetable lipid-based compn. and candle)

L8 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 1998:31382 HCAPLUS

DN 128:66323

TI Process for producing a paraffin-based object, especially a perfumed candle

IN Matzat, Norbert; Matthaei, Michael; Starke, Claus

PA Schuemann Sasol G.m.b.H. und Co. K.-G., Germany; Matzat, Norbert; Matthaei, Michael; Starke, Claus

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C11C005-00

ICS A61K007-46

CC 62-5 (Essential Oils and Cosmetics)

FAN.CNT 1

|    | PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|----|------------|------|----------|-----------------|----------|
| PI | WO 9748784 | A1   | 19971224 | WO 1997-EP2670  | 19970524 |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,

# STN Columbus

LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,  
VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,  
GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,  
ML, MR, NE, SN, TD, TG

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|----------|
| DE 19707909                                                           | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19980108 | DE 1997-19707909 | 19970227 |
| CA 2258678                                                            | AA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19971224 | CA 1997-2258678  | 19970524 |
| AU 9729604                                                            | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19980107 | AU 1997-29604    | 19970524 |
| EP 906381                                                             | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19990407 | EP 1997-923997   | 19970524 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, SI, FI |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
| BR 9709825                                                            | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19990810 | BR 1997-9825     | 19970524 |
| JP 2001501983                                                         | T2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20010213 | JP 1998-502169   | 19970524 |
| US 6224641                                                            | B1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20010501 | US 1998-202755   | 19981216 |
| PRAI DE 1996-19624454                                                 | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19960619 |                  |          |
| DE 1996-19643719                                                      | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19961023 |                  |          |
| DE 1997-19707909                                                      | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19970227 |                  |          |
| WO 1997-EP2670                                                        | W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19970524 |                  |          |
| AB                                                                    | In a method for prodn. of a perfumed candle or other paraffin-based object with a proportion of a perfume, the perfume is dissolved in a solvent contg. an ester, esp. an org. ester such as a triglyceride, and the soln. is in turn added to or dissolved in paraffin. The perfume forms a solid soln. with the solvent; this soln. may contain a high proportion of perfume and is readily mixed homogeneously with powd. paraffin base. The powd. mixt. is formed into a candle or other object by compression. Thus, hardened palm oil (penetration 6 mm-1) contg. 30% essential oil was mixed 1:1 with paraffin paste to produce a product with penetration ~46 mm-1 at 30°. |          |                  |          |
| ST                                                                    | paraffin wax perfumed candle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
| IT                                                                    | Palm oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
|                                                                       | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                       | (hardened; process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |                  |          |
| IT                                                                    | Waxes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |                  |          |
|                                                                       | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                       | (micro-; process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
| IT                                                                    | Candles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                  |          |
|                                                                       | Perfumes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
|                                                                       | (process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                  |          |
| IT                                                                    | Paraffin waxes, biological studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |                  |          |
|                                                                       | Tallow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |          |                  |          |
|                                                                       | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                       | (process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                  |          |
| IT                                                                    | Esters, biological studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                  |          |
|                                                                       | Glycerides, biological studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |                  |          |
|                                                                       | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                       | (solvents; process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |                  |          |
| L8                                                                    | ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2001 ACS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
|                                                                       | <u>Full-text</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |                  |          |
| AN                                                                    | 1997:53532 HCAPLUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |                  |          |
| DN                                                                    | 126:77354                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |                  |          |
| TI                                                                    | Gelatinized plant oil for use as candles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
| IN                                                                    | Eini, Meir                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                  |          |

## STN Columbus

PA Israel  
 SO Israeli, 23 pp.  
 CODEN: ISXXAQ  
 DT Patent  
 LA English  
 IC ICM C22C005-00  
 CC 51-12 (Fossil Fuels, Derivatives, and Related Products)  
 Section cross-reference(s): 17

FAN.CNT 1

|    | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | KIND | DATE     | APPLICATION NO. | DATE     |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | IL 109814                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | A1   | 19960618 | IL 1994-109814  | 19940529 |
| AB | A compn. for use in illumination, comprising: (a) at least one oil; and (b) at least one gelatinizing agent having 15 or more carbons, selected from the group consisting of fatty acids and fatty acid derivs., in a sufficiently high concn. to gelatinize the oil. The oil is selected from rose hip oil, wheat germ oil, apricot kernel oil, avocado oil, sunflower oil, evening primrose oil, jojoba oil, corn germ oil, mineral oil, and olive oil. The gelatinizing agent is selected from the alcs. 1-pentadecanol, cetyl alc., 1-heptadecanol, stearyl alc., nonadecanol, arachidyl alc., heneicosanol, behenyl alc., lignoceryl alc., 1-pentacosanol, 1-hexacosanol, 1-heptacosanol, 1-octacosanol, 1-tracontanol, 1-tetracontanol, or 1-pentacontanol or from the satd. fatty acids. Stearic acid, hexacosanic acid, stearic acid Et ester, stearic acid Me ester, stearic acid Pr ester, stearic anhydride, $\alpha$ -hydroxy stearic acid, triglycerides, 12-hydroxy stearic acid, 1-monopalmitoyl-rac-glyceride, 1,3-dipalmitin, 1,2-dipalmitoyl-3-myristoyl-rac-glycerol, and hexadecanedioic acid. |      |          |                 |          |
| ST | candle gelatinized plant oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |          |                 |          |
| IT | Fats and Glyceridic oils, uses<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(apricot kernel; gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |          |                 |          |
| IT | Candles<br>RL: IMF (Industrial manufacture); PREP (Preparation)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |          |
| IT | Avocado oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |          |                 |          |
| IT | Corn oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |                 |          |
| IT | Evening primrose oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |          |                 |          |
| IT | Fatty acids, uses<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |          |                 |          |
| IT | Glycerides, uses<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |          |
| IT | Hydrocarbon oils<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |          |
| IT | Jojoba oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |          |                 |          |
| IT | Olive oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |      |          |                 |          |
| IT | Sunflower oil<br>RL: TEM (Technical or engineered material use); USES (Uses)<br>(gelatinized plant oil for use as candles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |

# STN Columbus

IT Wheat germ oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (gelatinized plant oil for use as candles)

IT Fats and Glyceridic oils, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (rose hip; gelatinized plant oil for use as candles)

IT 57-11-4, Octadecanoic acid, uses 106-14-9 111-61-5, Stearic acid ethyl ester 112-61-8, Stearic acid methyl ester 112-92-5, 1-Octadecanol 502-52-3, 1,3-Dipalmitin 505-54-4, Hexadecanedioic acid 506-46-7, Hexacosanoic acid 506-51-4, Lignoceryl alcohol 506-52-5, 1-Hexacosanol 557-61-9, 1-Octacosanol 593-50-0, 1-Triacontanol 629-22-1,  $\alpha$ -Hydroxy stearic acid 629-76-5, 1-Pentadecanol 629-96-9, Arachidyl alcohol 638-08-4, Stearic anhydride 661-19-8, Behenyl alcohol 1454-85-9, 1-Heptadecanol 2004-39-9, 1-Heptacosanol 3634-92-2, Stearic acid propyl ester 26040-98-2, 1-Pentacosanol 26657-96-5 29592-89-0 36653-82-4, 1-Hexadecanol 40710-43-8, 1-Pentacontanol 51227-32-8, Heneicosanal 52783-43-4, Nonadecanol 164350-12-3, 1-Tetracontanol  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (gelatinized plant oil for use as candles)

L8 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2001 ACS

## Full-text

AN 1989:56305 HCAPLUS  
 DN 110:56305  
 TI Study on candle millet seed oil (*Pennisetum americanum* L. Schum.)  
 AU Lognay, G.; Marlier, M.; Baudart, E.; Severin, M.; Casimir, J.  
 CS Lab. Chim. Gen. Org., Fac. Sci. Agron. Etat, Gembloux, Belg.  
 SO Riv. Ital. Sostanze Grasse (1988), 65(4), 291-4  
 CODEN: RISGAD; ISSN: 0035-6808

DT Journal  
 LA French  
 CC 17-11 (Food and Feed Chemistry)

AB Two cultivars of Millet seeds (*P. americanum*) were studied. The fatty acid profile was characterized by high levels of linoleic, oleic, and palmitic acids. Other minor acids with 20, 22, and 24 C atoms were also identified by GC-MS. The predominant **triglycerides** calcd. on the basis of the random 1-2 distribution were PLO, PLL, OLL, OOL, PLP, and LLL. GC-MS and GLC investigations on the sterol and tocopherol fractions revealed that the main constituents are sitosterol and campesterol for the former and  $\alpha$ - and  $\gamma$ -tocopherol for the latter. Nutritional properties in relation to oil compn. are also briefly discussed.

ST millet seed oil compn; tocopherol millet seed oil; **triglyceride** millet seed oil; fatty acid millet seed oil; sterol millet seed oil

IT Fatty acids, biological studies  
 Glycerides, biological studies  
 Hydrocarbons, biological studies  
 Lipids, biological studies  
 Tocopherols  
 RL: BIOL (Biological study)  
 (of millet seed oil, variety in relation to)

IT Steroids, biological studies  
 RL: BIOL (Biological study)  
 (hydroxy, of millet seed oil, variety in relation to)

IT Glycerides, biological studies  
 RL: BIOL (Biological study)  
 (mono-, of millet seed oil, variety in relation to)

IT Oils, glyceridic  
 RL: PRP (Properties)  
 (pearl millet seed, compn. of, variety in relation to)

IT Lipids, biological studies  
 RL: BIOL (Biological study)



# STN Columbus

(polar, of millet seed oil, variety in relation to)

IT 57-88-5, Cholesterol, biological studies 59-02-9,  $\alpha$ -Tocopherol  
 83-46-5,  $\beta$ -Sitosterol 83-48-7 119-13-1,  $\delta$ -Tocopherol  
 122-32-7 148-03-8,  $\beta$ -Tocopherol 474-62-4, Campesterol 481-19-6,  
 $\Delta^7$ -Stigmasterol 537-40-6 1721-51-3,  $\alpha$ -Tocotrienol  
 7616-22-0,  $\gamma$ -Tocopherol 18472-36-1,  $\Delta^5$ -Avenasterol  
 23290-26-8 26836-30-6 26836-31-7 26836-32-8 26836-35-1  
 26836-36-2 26836-37-3 26836-38-4 26836-39-5 26836-40-8  
 27071-84-7 28409-91-8 28409-94-1 28880-78-6 29590-02-1  
 29661-35-6  
 RL: BIOL (Biological study)  
 (of millet seed oil, variety in relation to)

L8 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 1980:145416 HCAPLUS

DN 92:145416

TI Utilization of protected and unprotected rapeseed by lactating dairy cows

AU Christensen, David A.; Cochran, Marlene; Steacy, G.

CS Dep. Anim. Poult. Sci., Univ. Saskatchewan, Saskatoon, SK, Can.

SO Proc. Int. Rapeseed Conf., 5th (1979), Meeting Date 1978, Volume 2, 217-19  
 Publisher: Dr. Goesta Andersson, Svaloev, Swed.  
 CODEN: 42TCAX

DT Conference

LA English

CC 18-3 (Animal Nutrition)  
 Section cross-reference(s): 4

AB Cows given low-forage control (35% alfalfa-bromegrass hay), high-forage  
 control (50% hay), low forage feed contg. 8% H<sub>2</sub>CO [50-00-0]-treated  
 soybean-tallow mixt., or 8% H<sub>2</sub>CO-treated low-glucosinolate (cultivar  
 Tower) rapeseed had milk prodns. of 28.6, 27.3, 30.4, and 31.7 kg/day,  
 resp. The treated rapeseed-contg. feed produced higher milk fat and  
 better feed efficiency than the other test materials. Cows given similar  
 feeds, but with unprotected soybean meal (2.2% fat), 6.3 or 12.6% cultivar  
 Candle rapeseed (5 and 8% fat, resp.), or 11.2% cultivar Tower rapeseed  
 (8% fat) had milk yields of 27.7, 27.6, 26.8, and 25.7 kg/day, resp.  
 Those given the rape-contg. feeds all had significantly higher plasma  
 cholesterol [57-88-5] and triglyceride levels.

ST rapeseed formaldehyde cow milk; protein rape formaldehyde cow milk; lipid  
 rape formaldehyde cow milk; cholesterol cow feed rapeseed; plasma lipid  
 cow rape feed

IT Cattle  
 (feeding expt. on cows, with formaldehyde-treated rape)

IT Brassica campestris  
 Rape  
 (feeding expt. with formaldehyde-treated, on dairy cows)

IT Lipids  
 RL: BIOL (Biological study)  
 (formaldehyde-protected, of rapeseed, feeding expt. with, on dairy  
 cows)

IT Glycerides, biological studies  
 RL: BIOL (Biological study)  
 (of blood plasma, of cow, rapeseed of feed effect on)

IT Milk  
 (prodn. of, feeding expt. with formaldehyde-treated rape protein on)

IT 57-88-5, biological studies  
 RL: BIOL (Biological study)  
 (of blood plasma, of cow, rapeseed of feed effect on)

IT 50-00-0, biological studies  
 RL: BIOL (Biological study)  
 (rapeseed treated with, feeding expt. with, on dairy cows)

## STN Columbus

=> d his

(FILE 'HOME' ENTERED AT 10:16:31 ON 04 NOV 2001)

FILE 'HCAPLUS' ENTERED AT 10:16:41 ON 04 NOV 2001

L1 0 S TW373019/PN  
L2 0 S TW0373019/PN  
L3 0 S TW373019/9N  
L4 0 S TW373019/PN  
L5 2612 S TW  
L6 4 S L5 AND PN  
L7 4 S TW (P) PN  
L8 6 S TRIGLYCERIDE AND CANDLE

=> s palm and candle

10450 PALM  
680 PALMS  
10712 PALM  
(PALM OR PALMS)  
1607 CANDLE  
1360 CANDLES  
2520 CANDLE  
(CANDLE OR CANDLES)  
L9 11 PALM AND CANDLE

=> d l9 1-11 all

L9 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2001 ACS

### Full-text

AN 2001:426985 HCAPLUS  
DN 135:168611  
TI Dimethyl ether (DME). Assessment of viscosity using the new volatile fuel viscometer (VFVM)  
AU Sivebaek, Ion M.; Sorenson, Spencer C.; Jakobsen, Joergen  
CS Technical University of Denmark, Den.  
SO Soc. Automot. Eng., [Spec. Publ.] SP (2001), SP-1632(State of Alternative Fuel Technologies 2001), 1-9  
CODEN: SAESA2; ISSN: 0099-5908  
PB Society of Automotive Engineers  
DT Journal  
LA English  
CC 51-12 (Fossil Fuels, Derivatives, and Related Products)  
Section cross-reference(s): 52  
AB This paper describes the development and test of a viscometer capable of handling di-Me Ether (DME) and other volatile fuels. DME has excellent combustion characteristics in diesel engines but the injection equipment can break down prematurely due to extensive wear when handling this fuel. It was established, in earlier work, that the wear in the pumps is substantial even if the lubricity of DME is raised to a believed acceptable level using anti-wear additives. An influence of the viscosity on the wear in the pumps was suspected. The problem, up to now, was that the viscosity of DME has only been estd. or calcd. but never actually measured. In the present work a volatile fuel viscometer (VFVM) was developed. It is of the capillary type and it was designed to handle DME, pure or with additives. The kinematic and dynamic viscosities of pure DME were measured at 0.185 cSt and 0.122 cP at 25° resp. The VFVM established that low concns. of additives do not affect the viscosity of DME significantly. This is the case even when the additive has a high viscosity or is solid at ambient temp. The viscosity of DME blends can reach that of diesel oil but only when the additive is present in large proportions. It is not believed that reasonably additive-contg. DME can

## STN Columbus

reach the same viscosity and lubricity as diesel oil. The soln. is rather to design the pumps so they can handle pure DME.

ST dimethyl ether viscosity volatile fuel viscometer

IT Rape oil  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (Me esters; assessment of viscosity of di-Me ether using volatile fuel viscometer)

IT Candles  
 Diesel engines  
 Diesel fuel substitutes  
 Injectors  
 Viscometers  
 Wear  
 (assessment of viscosity of di-Me ether using volatile fuel viscometer)

IT Castor oil  
 Lard  
 Palm oil  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (assessment of viscosity of di-Me ether using volatile fuel viscometer)

IT Fuel additives  
 (lubricity; assessment of viscosity of di-Me ether using volatile fuel viscometer)

IT 291291-67-3, Lubrizol LZ 539N  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (assessment of viscosity of di-Me ether using volatile fuel viscometer)

IT 115-10-6, Dimethyl ether  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (assessment of viscosity of di-Me ether using volatile fuel viscometer)

RE.CNT 19

RE

- (1) Anon; ASTM Standard D446-74
- (2) Anon; DEA Mineraloel AG Handbook DME 99.99
- (3) Anon; ISO Standard 1997, 12156
- (4) Anon; Standard ISO 1994, 3105
- (5) Briant, J; Rheological Properties of Lubricants 1989
- (6) Christensen, R; SAE Paper 1997, 971665
- (7) Einstein, A; Dover Publications 1956
- (8) Fleisch, T; SAE Paper 1995, 950061
- (9) Goering, C; Transactions of the ASAE 1982, P1472 HCAPLUS
- (10) Hansen, J; SAE Paper 1995, 950063
- (11) Japar, S; International Journal of Chemical Kinetics 1990, V22, P1257 HCAPLUS
- (12) Kajitani, S; SAE Paper 1997, 972973
- (13) Lacey, P; SAE Paper 2000, 2000-01-1804
- (14) Lacey, P; SAE Paper 2000, 2000-01-1917
- (15) Nielsen, K; Fall Technical Conference 1999, V33-1 (ASME Paper 99-ICE-217 ICE), P145
- (16) Reid, R; The Properties of Gases and Liquids. Fourth Edition 1987
- (17) Sivebaek, I; Proceeding of the 9th Nordic Symposium on Tribology - NORDTRIB 2000 - At Porvoo 2000
- (18) Sivebaek, I; SAE Paper 2000, 2000-01-2970
- (19) Sorenson, S; SAE Paper 1995, 950064

L9 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 2000:316631 HCAPLUS  
 DN 132:323795  
 TI Non-paraffin candle composition  
 IN Calzada, Jose Francisco; Upadhyaya, Janardan  
 PA Can.  
 SO U.S., 4 pp.

# STN Columbus

CODEN: USXXAM

DT Patent

LA English

IC ICM C10L005-00  
ICS F23D003-16

NCL 044275000

CC 51-12 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 1

|    | PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|----|------------|------|----------|-----------------|----------|
| PI | US 6063144 | A    | 20000516 | US 1999-255951  | 19990223 |

AB A substantially non-paraffin combustible **candle** compn. consists essentially of at least 30 parts by wt. of stearic acid, at least 5 parts by wt. of vegetable-derived wax having a m.p. of at least 50°, 0-50 parts by wt. of at least one vegetable oil, 0 to 10 parts by wt. of at least one fragrance and 0 to 1 part by wt. of at least one oxidn. inhibitor.

ST nonparaffin wax **candle** vegetable oil

IT Waxes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(arrayan; non-paraffin **candle** compn.)

IT Castor oil  
RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated; non-paraffin **candle** compn.)

IT Antioxidants  
**Candles**  
(non-paraffin **candle** compn.)

IT Candelilla wax  
Carnauba wax  
Coconut oil  
Corn oil  
Cottonseed oil  
**Palm** oil  
Soybean oil  
Sunflower oil  
RL: TEM (Technical or engineered material use); USES (Uses)  
(non-paraffin **candle** compn.)

IT Waxes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(sugarcane; non-paraffin **candle** compn.)

IT Waxes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(vegetable-derived; non-paraffin **candle** compn.)

IT Sugarcane  
RL: TEM (Technical or engineered material use); USES (Uses)  
(wax; non-paraffin **candle** compn.)

IT 57-11-4, Stearic acid, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(non-paraffin **candle** compn.)

RE.CNT 6

RE

- (1) Cangardel; US 3871815 1975 HCAPLUS
- (2) Daling; US 3630697 1971 HCAPLUS
- (3) Easterday; US 3843312 1974
- (4) Knowles; US 3613658 1971
- (5) Morrison; US 5879694 1999 HCAPLUS
- (6) Requejo; US 5919423 1999 HCAPLUS

L9 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 1998:31382 HCAPLUS

DN 128:66323

# STN Columbus

TI Process for producing a paraffin-based object, especially a perfumed candle

IN Matzat, Norbert; Matthaei, Michael; Starke, Claus

PA Schuemann Sasol G.m.b.H. und Co. K.-G., Germany; Matzat, Norbert; Matthaei, Michael; Starke, Claus

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C11C005-00

ICS A61K007-46

CC 62-5 (Essential Oils and Cosmetics)

FAN.CNT 1

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | KIND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DATE     | APPLICATION NO.  | DATE     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|----------|
| WO 9748784                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19971224 | WO 1997-EP2670   | 19970524 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM<br>RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
| DE 19707909                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19980108 | DE 1997-19707909 | 19970227 |
| CA 2258678                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | AA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19971224 | CA 1997-2258678  | 19970524 |
| AU 9729604                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19980107 | AU 1997-29604    | 19970524 |
| EP 906381                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 19990407 | EP 1997-923997   | 19970524 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, SI, FI                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
| BR 9709825                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19990810 | BR 1997-9825     | 19970524 |
| JP 2001501983                                                                                                                                                                                                                                                                                                                                                                                                                                                               | T2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20010213 | JP 1998-502169   | 19970524 |
| US 6224641                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20010501 | US 1998-202755   | 19981216 |
| PRAI DE 1996-19624454                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19960619 |                  |          |
| DE 1996-19643719                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19961023 |                  |          |
| DE 1997-19707909                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19970227 |                  |          |
| WO 1997-EP2670                                                                                                                                                                                                                                                                                                                                                                                                                                                              | W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 19970524 |                  |          |
| AB                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | In a method for prodn. of a perfumed candle or other paraffin-based object with a proportion of a perfume, the perfume is dissolved in a solvent contg. an ester, esp. an org. ester such as a triglyceride, and the soln. is in turn added to or dissolved in paraffin. The perfume forms a solid soln. with the solvent; this soln. may contain a high proportion of perfume and is readily mixed homogeneously with powd. paraffin base. The powd. mixt. is formed into a candle or other object by compression. Thus, hardened palm oil (penetration 6 mm-1) contg. 30% essential oil was mixed 1:1 with paraffin paste to produce a product with penetration ~46 mm-1 at 30°. |          |                  |          |
| ST                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | paraffin wax perfumed candle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
| IT                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Palm oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (hardened; process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |                  |          |
| IT                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Waxes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (micro-; process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |                  |          |
| IT                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Candles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Perfumes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |          |                  |          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (process for producing a paraffin-based object, esp. a perfumed candle)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |                  |          |
| IT                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Paraffin waxes, biological studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |                  |          |

# STN Columbus

Tallow  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (process for producing a paraffin-based object, esp. a perfumed  
 candle)

IT Esters, biological studies  
 Glycerides, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (solvents; process for producing a paraffin-based object, esp. a  
 perfumed candle)

L9 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2001 ACS  
Full-text  
 AN 1997:720577 HCAPLUS  
 DN 127:308624  
 TI Wax-based **candles** comprising paraffin wax and an ester and/or  
 ester-montan wax mixture, and manufacture of the wax, especially for  
**candles**  
 IN Matzat, Norbert; Meyer, Gernot; Laudi, Rolf; Matthaei, Michael;  
 Hildebrand, Guenter; Starke, Claus  
 PA Schuemann Sasol GmbH Co. KG, Germany  
 SO Neth. Appl., 11 pp.  
 CODEN: NAXXAN  
 DT Patent  
 LA Dutch  
 IC ICM C11C005-00  
 ICS C08L091-06  
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
 FAN.CNT 1

|      | PATENT NO.                                                                                   | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | NL 1005033                                                                                   | A1   | 19970722 | NL 1997-1005033 | 19970117 |
|      | NL 1005033                                                                                   | C2   | 19980715 |                 |          |
|      | EP 838517                                                                                    | A1   | 19980429 | EP 1997-112397  | 19970718 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO |      |          |                 |          |
| PRAI | DE 1996-19601998                                                                             |      | 19960120 |                 |          |
|      | DE 1996-19644737                                                                             |      | 19961028 |                 |          |

AB In the **candles**, the paraffin wax component is of tech. quality and has  
 f.p.  $\leq 55^\circ$  and the ester component has f.p.  
 $\geq 35^\circ$ . This compn. causes **candles** with a relative large  
 cross-sectional area to melt evenly when lit. A mixt. of paraffin having  
 f.p.  $36^\circ$  with hardened **palm oil** (penetration 6/mm at  $30^\circ$ )  
 in ratio 1:1 gave penetration 46/mm at  $30^\circ$ .

ST paraffin wax hardened **palm oil candle**; tallow paraffin wax **candle**;  
 ester montan wax paraffin **candle**

IT Isoalkanes  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (C16-45, admixts. with alkanes and esters and montan wax; for f.p.  
 control for even melting at large-diam. **candles**)

IT Paraffin waxes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (admixts. with esters and montan wax; for f.p. control for even melting  
 at large-diam. **candles**)

IT Alkanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (admixts. with isoalkanes and esters and montan wax; for f.p. control  
 for even melting at large-diam. **candles**)

IT Esters, uses  
 Glycerides, uses  
 Montan wax

# STN Columbus

Palm kernel oil  
 Palm oil  
 Rape oil  
 Tallow  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (admixts. with paraffin wax; for f.p. control for even melting at large-diam. candles)  
 IT 57-11-4, Octadecanoic acid, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (palm, admixts. with paraffin wax; for f.p. control for even melting at large-diam. candles)

L9 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2001 ACS  
Full-text  
 AN 1997:720575 HCAPLUS  
 DN 127:308623  
 TI Method and waxes for manufacturing candles  
 IN Matzat, Norbert; Meyer, Gernot; Laudi, Rolf; Matthaei, Michael; Hildebrand, Guenter; Starke, Claus  
 PA Schuemann Sasol GmbH Co. KG, Germany  
 SO Neth. Appl., 10 pp.  
 CODEN: NAXXAN  
 DT Patent  
 LA Dutch  
 IC ICM C11C005-00  
 ICS C08L091-06  
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
 FAN.CNT 1

|      | PATENT NO.       | KIND | DATE     | APPLICATION NO. | DATE     |
|------|------------------|------|----------|-----------------|----------|
| PI   | NL 1005021       | A1   | 19970718 | NL 1997-1005021 | 19970116 |
|      | NL 1005021       | C2   | 19980720 |                 |          |
| PRAI | DE 1996-19601521 |      | 19960117 |                 |          |

AB In this method, in which the waxes comprise a no. of cryst. components,  $\geq 1$  of which has a fine-cryst. structure and  $\geq 1$  of which has a coarse-cryst. structure, the components are first mixed in liq. form, cooled at high temp. gradient such that essentially no segregation of the components occurs, after which the solidified material is processed to obtain the candles. A mixt. of 65% paraffin (m.p.  $\sim 57^\circ$ , softening point  $\sim 30^\circ$ ) and balance stearin (m.p.  $\sim 54^\circ$ ) was melted at  $80^\circ$ , solidified on a roller cooler, and processed to candles.  
 ST cryst wax mixing melting cooling candle; paraffin stearin wax candle; hardened palm oil paraffin candle  
 IT Fatty alcohols  
 Microcrystalline waxes  
 Paraffin waxes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (admixts. with coarse-cryst. waxes; segregation prevention in candle manuf. by rapid cooling of)  
 IT Fats and Glyceridic oils, uses  
 Fish oils  
 Tallow  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (admixts. with microcryst. waxes; segregation prevention in candle manuf. by rapid cooling of)  
 IT Waxes  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coarse-cryst., admixts. with microcryst. waxes; segregation prevention in candle manuf. by rapid cooling of)  
 IT Palm oil  
 RL: TEM (Technical or engineered material use); USES (Uses)

## STN Columbus

- (hardened, admixts. with microcryst. waxes; segregation prevention in candle manuf. by rapid cooling of)
- IT **Candles**  
(segregation prevention in candle manuf. by rapid cooling of molten mixts. of fine-cryst. and coarse-cryst. wax mixts. for)
- IT 11099-07-3, Stearin  
RL: TEM (Technical or engineered material use); USES (Uses)  
(admixts. with microcryst. waxes; segregation prevention in candle manuf. by rapid cooling of)
- L9 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2001 ACS  
Full-text  
AN 1996:548846 HCAPLUS  
DN 125:193957  
TI Effect of temperature, light and gamma irradiation on quality of some common edible oils  
AU Ahmad, Taufiq; Sattar, Abdus; Atta, Shaheen  
CS Nucl. Inst. Food Agric., Peshawar, Pak.  
SO Sci. Int. (Lahore) (1995), 7(4), 597-598  
CODEN: SINTE8; ISSN: 1013-5316  
DT Journal  
LA English  
CC 17-9 (Food and Feed Chemistry)  
AB Effect of temp., light and gamma irradiation was tested on some common edible oils e.g. soybean, sunflower, corn and palm products (palm olein and palm stearin). One set of samples was exposed to continuous fluorescent light (100 ft-candles) at ambient temps. (30-35°C) while the other was kept in the refrigerator. Detn. of peroxide and cholesterol values at successive intervals for a period of 5 mo revealed that there was a significant increase in peroxide values of the samples exposed to fluorescent light at room temp. than those in the refrigerator. Palm olein showed the greatest stability with mean POV 73.44 meq/kg followed by corn, sunflower and soybean oils with mean POV values of 105.37, 115.2 and 128.6 meq/kg resp. after 5 mo storage. A slight increase was noted in cholesterol % for both the storage conditions, but smallest increase was noted in palm olein samples. Treatment of palm products to irradiation (2.5-10.0 kGy) showed a regular increase in POV for palm olein (9.4 meq/kg to 13.0 meq/kg) and palm stearin (17.48 to 22.7 meq/kg). However, a clear decreasing trend was observed in the iodine values of these palm products on exposure to gamma irradiation.  
ST temp gamma radiation light vegetable oil  
IT Gamma ray  
Temperature effects, biological  
(effect of temp., light and gamma radiation on quality of some common edible oils)
- IT Corn oil  
Soybean oil  
Sunflower oil  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(effect of temp., light and gamma radiation on quality of some common edible oils)
- IT Peroxides, formation (nonpreparative)  
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)  
(effect of temp., light and gamma radiation on quality of some common edible oils)
- IT Palm oil  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(oleins, effect of temp., light and gamma radiation on quality of some common edible oils)
- IT Fats and Glyceridic oils  
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
(vegetable, effect of temp., light and gamma radiation on quality of



# STN Columbus

some common edible oils)  
 IT 57-88-5, Cholesterol, biological studies  
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process)  
 (effect of temp., light and gamma radiation on quality of some common  
 edible oils)

L9 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2001 ACS

## Full-text

AN 1994:137639 HCAPLUS  
 DN 120:137639  
 TI Method of making a **candle** and composition thereof  
 IN Lin, Kuo Lung  
 PA Chen, Wen Chi, Taiwan  
 SO Brit. UK Pat. Appl., 16 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 IC ICM C11C005-00  
 ICS C08L091-06  
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
 FAN.CNT 1

|    | PATENT NO. | KIND | DATE     | APPLICATION NO. | DATE     |
|----|------------|------|----------|-----------------|----------|
| PI | GB 2262537 | A1   | 19930623 | GB 1991-27167   | 19911220 |
|    | GB 2262537 | B2   | 19951004 |                 |          |

AB The method providing a **candle** which releases reduced smoke, odor, and toxic particles on burning includes heat melting a butter oil and a solidified oil, mixing the butter oil and the solidified oil, and cooling and solidifying the mixt. to provide the wax of the **candle**, the butter oil having m.p. 35-37° and palmitic content ≤0.1% and the solidified oil having acid value <0.5, I value <2.0, sapon. value 195-198, m.p. 60±1°, and impurity content <0.2%. A **candle** was prepd. from a butter oil contg. **palm** oil 50-58, coconut oil 30-35, soybean oil 5-8, cotton seed oil 5-8, flavor 2%, and other additives and a solidified oil contg. 80-90% **palm** oil and 10-20% soybean oil.

ST **candle** manuf butter oil compn; solidified oil butter **candle** manuf  
 IT Coconut oil  
 Cottonseed oil  
 Palm oil  
 Soybean oil  
 RL: USES (Uses)  
 (butter oil contg., for manuf. of **candles**)

IT **Candles**  
 (manuf. of, from butter oil and solidified oil, with reduced smoke, odor, and toxic particles on burning)

IT **Palm** oil  
 RL: USES (Uses)  
 (hydrogenated, butter oil contg., for manuf. of **candles**)

L9 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2001 ACS

## Full-text

AN 1989:556417 HCAPLUS  
 DN 111:156417  
 TI Paraffin wax substitute  
 IN Phadoemchit, Tajchai; Boonvichitr, Saovaluck  
 PA Thailand  
 SO U.S., 3 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C08L091-00  
 ICS C11C003-12

## STN Columbus

NCL 106244000

CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

FAN.CNT 1

|    | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                          | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | US 4842648                                                                                                                                                                                                                                                                                                                                                                                                          | A    | 19890627 | US 1987-112352  | 19871022 |
| AB | The title substitute, useful in the manuf. of shoe waxes, <b>candles</b> , waxed paper, etc., which is completely compatible with paraffin and hydrocarbon waxes, comprises a mixt. of 1-5% glyceryl monostearate (an emulsifying agent which reduces the amt. of cracking during molding) and refined, bleached, and the remainder as deodorized <b>palm</b> stearin. This compn. has m.p. 55-62° and I value 0-5. |      |          |                 |          |
| ST | paraffin wax substitute manuf; stearin glyceryl monostearate wax substitute                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |
| IT | Waxes and Waxy substances                                                                                                                                                                                                                                                                                                                                                                                           |      |          |                 |          |
|    | RL: USES (Uses)<br>(glyceryl monostearate-refined <b>palm</b> stearin mixts. as, compatible with or as substitutes for paraffin waxes)                                                                                                                                                                                                                                                                              |      |          |                 |          |
| IT | Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous                                                                                                                                                                                                                                                                                                                                                        |      |          |                 |          |
|    | RL: USES (Uses)<br>(substitutes for, refined <b>palm</b> stearin-glyceryl monostearate mixts. as, manuf. of)                                                                                                                                                                                                                                                                                                        |      |          |                 |          |
| IT | 11099-07-3, Stearin                                                                                                                                                                                                                                                                                                                                                                                                 |      |          |                 |          |
|    | RL: USES (Uses)<br>(mixts. with glyceryl monostearate, as substitutes for paraffin waxes)                                                                                                                                                                                                                                                                                                                           |      |          |                 |          |
| IT | 31566-31-1, Glyceryl monostearate                                                                                                                                                                                                                                                                                                                                                                                   |      |          |                 |          |
|    | RL: USES (Uses)<br>(mixts. with refined and bleached and deodorized <b>palm</b> stearin, as substitutes for paraffin waxes)                                                                                                                                                                                                                                                                                         |      |          |                 |          |

L9 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2001 ACS

Full-text

AN 1988:633169 HCAPLUS

DN 109:233169

TI Manufacture of wax from **palm** oil

IN Tachai, Fuadonchitsuto

PA Bangkok Realty Co. Ltd., Thailand

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11B011-00

CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

Section cross-reference(s): 43

FAN.CNT 1

|    | PATENT NO.                                                                                                                                                                                                                                                                                          | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | JP 63168494                                                                                                                                                                                                                                                                                         | A2   | 19880712 | JP 1986-316033  | 19861227 |
| AB | Wax suitable for use in prepg. wax paper is manufd. by hydrogenating <b>palm</b> stearin and optionally beef tallow to an iodine no. (I) of 1-5. Hydrogenation of <b>palm</b> stearin (I 37-42, m.p. 50-52°) to I 1-5 provided a product useful for prepg. <b>candles</b> , matches, and wax paper. |      |          |                 |          |
| ST | <b>palm</b> stearin hydrogenation wax; <b>candle</b> hydrogenated <b>palm</b> stearin; match hydrogenated <b>palm</b> stearin; paper wax hydrogenated <b>palm</b> stearin                                                                                                                           |      |          |                 |          |
| IT | Tallow                                                                                                                                                                                                                                                                                              |      |          |                 |          |
|    | RL: USES (Uses)<br>(hydrogenation of <b>palm</b> oil and, for waxes)                                                                                                                                                                                                                                |      |          |                 |          |
| IT | <b>Palm</b> oil                                                                                                                                                                                                                                                                                     |      |          |                 |          |
|    | RL: RCT (Reactant)<br>(hydrogenation of, for waxes)                                                                                                                                                                                                                                                 |      |          |                 |          |
| IT | Hydrogenation                                                                                                                                                                                                                                                                                       |      |          |                 |          |
|    | (of <b>palm</b> oil, for waxes)                                                                                                                                                                                                                                                                     |      |          |                 |          |

# STN Columbus

IT Waxes and Waxy substances  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of, by hydrogenation of palm oil)  
 IT 1333-74-0  
 RL: USES (Uses)  
 (hydrogenation, of palm oil, for waxes)

L9 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2001 ACS

## Full-text

AN 1988:495094 HCAPLUS  
 DN 109:95094  
 TI Hydrogenation of palm stearin  
 IN Phadoemchit, Tajchai  
 PA Bangkok Realty Co. Ltd., Thailand  
 SO Brit. UK Pat. Appl., 8 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 IC ICM C11C003-12  
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)  
 FAN.CNT 1

|    | PATENT NO.                                                                                                                                                                                                                                                              | KIND | DATE     | APPLICATION NO. | DATE     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI | GB 2197337                                                                                                                                                                                                                                                              | A1   | 19880518 | GB 1986-27486   | 19861117 |
| AB | Wax useful in making candles or match heads is obtained by hydrogenating palm stearin or its mixt. with cow tallow to iodine value 1-5. Thus, melted palm stearin was hydrogenated at 170-180°, 20-140 psi H using a Ni catalyst to give a product with iodine value 4. |      |          |                 |          |
| ST | palm stearin hydrogenation; cow tallow hydrogenation                                                                                                                                                                                                                    |      |          |                 |          |
| IT | Palm oil                                                                                                                                                                                                                                                                |      |          |                 |          |
|    | RL: RCT (Reactant)                                                                                                                                                                                                                                                      |      |          |                 |          |
|    | (hydrogenation of, for wax used in candles or match heads)                                                                                                                                                                                                              |      |          |                 |          |
| IT | Hydrogenation                                                                                                                                                                                                                                                           |      |          |                 |          |
|    | (of palm stearin, for wax used in candles or match heads)                                                                                                                                                                                                               |      |          |                 |          |
| IT | Fatty acids, reactions                                                                                                                                                                                                                                                  |      |          |                 |          |
|    | RL: RCT (Reactant)                                                                                                                                                                                                                                                      |      |          |                 |          |
|    | (palm-oil, hydrogenation of, for wax used in candles or match heads)                                                                                                                                                                                                    |      |          |                 |          |
| IT | Fatty acids, reactions                                                                                                                                                                                                                                                  |      |          |                 |          |
|    | RL: RCT (Reactant)                                                                                                                                                                                                                                                      |      |          |                 |          |
|    | (tallow, hydrogenation of, for wax used in candles or match heads)                                                                                                                                                                                                      |      |          |                 |          |
| IT | 7440-02-0, Nickel, uses and miscellaneous                                                                                                                                                                                                                               |      |          |                 |          |
|    | RL: CAT (Catalyst use); USES (Uses)                                                                                                                                                                                                                                     |      |          |                 |          |
|    | (catalysts, for hydrogenation of palm stearin and tallow)                                                                                                                                                                                                               |      |          |                 |          |
| IT | 1333-74-0                                                                                                                                                                                                                                                               |      |          |                 |          |
|    | RL: USES (Uses)                                                                                                                                                                                                                                                         |      |          |                 |          |
|    | (hydrogenation, of palm stearin, for wax used in candles or match heads)                                                                                                                                                                                                |      |          |                 |          |

L9 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2001 ACS

## Full-text

AN 1976:404318 HCAPLUS  
 DN 85:4318  
 TI Media, shade and fertilizer influence production of the areca palm, Chrysalidocarpus lutescens Wendl  
 AU Poole, Richard T.; Conover, Charles A.  
 CS Agric. Res. Cent., Inst. Food Agric. Sci., Apopka, Fla., USA  
 SO Proc. Fla. State Hortic. Soc. (1976), 88, 603-5  
 CODEN: PFSHA7  
 DT Journal

## STN Columbus

LA English  
CC 19-4 (Fertilizers, Soils, and Plant Nutrition)  
AB The best title plants were produced under 40% shade (6000-7000  
ft-candles) while growing in a medium of 3 parts Florida peat and 1 part  
mason sand and fertilized 3 times with 0.5 oz 18-6-12 Osmocote/8 in. pot  
at ~5-month intervals.  
ST areca palm fertilizer  
IT Chrysalidocarpus lutescens  
(fertilizer expts. with, with nitrogen and phosphorus and potassium)  
IT Fertilizer experiment  
(with nitrogen and phosphorus and potassium, with areca palm  
)

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